CLAIMS

What is claimed is:

1. A method for downloading data from an auto-storage database, allowing a server to perform one-time data retrieval for transmitting data to terminal devices that request for data downloading; the method comprising the steps of:

   (1) submitting a connection request via a terminal device to the server;

   (2) determining via the server if to accept the connection request from the terminal device; wherein if the request is accepted, step (3) is proceeded; or else, the step (2) is returned;

   (3) storing an IP (Internet protocol) address of the terminal device that submits the connection request via the server into an IP address temporary storage area;

   (4) starting timing via the server and determining if counted time reaches a preset time value of data retrieval that is pre-stored in the server; wherein if the preset time value is reached, step (5) is proceeded; or else, the step (4) is returned;

   (5) executing one-time data retrieval via the server for retrieving data from a database, and transmitting the retrieved data to the terminal device whose IP address is stored in the IP address temporary storage area; and

   (6) requesting via the terminal device for terminating connection to the server upon receiving the retrieved data, allowing the server to stop transmitting data to the terminal device.

2. The method of claim 1, wherein in the step (1), the terminal device submits the connection request to the server through the use of transmission control protocol (TCP).

3. The method of claim 1, wherein in the step (5), the server transmits the retrieved data to the terminal device through the use of user datagram protocol (UDP).

4. The method of claim 1, wherein in the step (6), the terminal device requests for terminating the connection to the server through the use of TCP.

5. The method of claim 1, wherein the database is established in an auto-controls device, for storing data generated during operation of the auto-control device.

5 6. The method of claim 1, wherein the method for downloading data from an auto-storage database is applicable to a data display system.

7. A system for downloading data from an auto-storage database, comprising:

at least a terminal device for allowing a client to input a connection request and outputting data to the client, the terminal device being provided with a unique IP 10 (Internet protocol) address;

an auto-control device having a database for storing data generated during operation of the auto-control device; and

a server including an IP address temporary storage area, a timing module, a retrieving module and a downloading module, wherein, when the server receives the 15 connection request from the terminal device, it stores the IP address of the terminal device into the IP address temporary storage area, and prompts the timing module to start timing, so as to determine if counted time reaches a preset time value of data retrieval that is pre-stored in the server; if the preset time value is reached, the retrieving module retrieves data from the database of the auto-control device; then, the 20 downloading module transmits the retrieved data to the terminal device whose IP address is stored in the IP address temporary storage area; and the terminal device displays the retrieved data and requests for terminating connection to the server.

8. The system of claim 7, wherein the terminal device submits the connection request to the server through the use of transmission control protocol (TCP).

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9. The system of claim 7, wherein upon retrieving data from the database, the server transmits the retrieved data to the terminal device through the use of user datagram protocol (UDP).

10. The system of claim 7, wherein upon receiving the retrieved data from the server, the terminal device requests for terminating the connection to the server through the use of TCP.

11. The system of claim 7, wherein the system for downloading data from an auto-storage database is applicable to a data display system.

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